

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-36. (canceled)

37. (currently amended) A semiconductor device, comprising:

a substrate;

an insulating layer formed on the substrate;

a conductive fin formed on the insulating layer, the conductive fin including a plurality of side surfaces and a top surface;

a source region formed on the insulating layer adjacent a first end of the conductive fin;

a drain region formed on the insulating layer adjacent a second end of the conductive fin;

a dielectric layer comprising hafnium formed on the top surface and side surfaces of the conductive fin in the channel region of the semiconductor device; and

a metal gate formed on the insulating layer adjacent the conductive fin in a channel region of the semiconductor device, the metal gate having a thickness ranging from about 700 Å to about 2,000 Å.

38. (canceled)

39. (currently amended) The semiconductor device of claim ~~[[38]]~~ 37, wherein the dielectric layer has a dielectric constant greater than about 3.9.

40. (previously presented) The semiconductor device of claim 37, wherein the metal gate comprises at least one of titanium or tantalum.

41. (currently amended) A semiconductor device, comprising:

- a substrate;
- an insulating layer formed on the substrate;
- a silicon fin formed on the insulating layer, the silicon fin including a plurality of side surfaces and a top surface;
- a dielectric layer comprising hafnium formed on the top surface and side surfaces of the silicon fin in the channel region of the semiconductor device;
- a source region formed on the insulating layer adjacent a first end of the silicon fin;
- a drain region formed on the insulating layer adjacent a second end of the silicon fin; and
- a metal gate formed on the insulating layer adjacent the silicon fin in a channel region of the semiconductor device, the metal gate having a thickness ranging from about 700 Å to about 2,000 Å.

42. (previously presented) The semiconductor device of claim 41, wherein the silicon fin has a thickness ranging from about 300 Å to about 1,500 Å.

43-45. (canceled)

46. (currently amended) The semiconductor device of claim ~~[[45]]~~ 41, wherein the dielectric material comprises a hafnium oxide.

47. (currently amended) The semiconductor device of claim ~~[[45]]~~ 41, wherein the dielectric layer comprises HfSiO.

48. (previously presented) The semiconductor device of claim 41, wherein the metal gate comprises titanium.

49. (previously presented) The semiconductor device of claim 48, wherein the metal gate comprises a titanium nitride.

50. (previously presented) The semiconductor device of claim 41, wherein the metal gate comprises tantalum.

51. (previously presented) The semiconductor device of claim 50, wherein the metal gate comprises a tantalum nitride.

52. (currently amended) A semiconductor device, comprising:

a substrate;

an insulating layer formed on the substrate;

a conductive fin formed on the insulating layer, the conductive fin including a plurality of side surfaces and a top surface and having a thickness ranging from about 300 Å to about 1,500 Å;

a dielectric layer ~~having a high dielectric constant~~ comprising hafnium formed on the top surface and side surfaces of the silicon fin;

a source region formed on the insulating layer adjacent a first end of the silicon fin;

a drain region formed on the insulating layer adjacent a second end of the silicon fin; and

a metal gate comprising titanium or tantalum formed on the insulating layer and over a portion of the conductive fin, the metal gate having a thickness ranging from about 700 Å to about 2000 Å.

53. (previously presented) The semiconductor device of claim 52, wherein the insulating layer comprises a silicon oxide having a thickness ranging from about 1,000 Å to about 3,000 Å.

54. (previously presented) The semiconductor device of claim 52, wherein the dielectric layer has a dielectric constant greater than 3.9.

55. (canceled)

56. (new) The semiconductor device of claim 52, wherein the metal gate comprises a titanium nitride.

57. (new) The semiconductor device of claim 52, wherein the metal gate comprises a tantalum nitride.